

Abstract of the Disclosure

Storing data in a cache memory of a storage device includes providing access to a first segment of the cache memory on behalf of a first group of external host systems coupled to the storage device and providing access to a second segment of the cache memory on behalf of a second group of external host systems coupled to the storage device, where at least a portion of the second segment of the cache memory is not part of the first segment of the cache memory. In some embodiments, no portion of the second segment of the cache memory is part of the first segment. Storing data in a cache memory of a storage device may also include providing a first data structure in the first segment of the cache memory and providing a second data structure in the second segment of the cache memory, where accessing the first segment includes accessing the first data structure and accessing the second segment includes accessing the second data structure. The data structures may be doubly linked ring lists of blocks of data. Each block of data may correspond to a track on a disk drive. Different groups of external host systems may be provided with different access, priority, and level of service with respect to the different segments of the cache.